

THE DIPTERA (SYRPHIDAE) OF THE  
SANDWELL VALLEY

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## Introduction

This paper is the second in a series listing the Diptera of the Sandwell Valley, West Bromwich. The first (Bloxham 1981) lists the calypterates of the area and the reader may refer to it for geological, ecological and methodological data still applicable to this part.

As many entomologists will know, the study of hoverflies, especially their identification and distribution, has been greatly facilitated by the recent publication of *British Hoverflies* by Stubbs and Falk (1983). This, together with earlier works by Verrall (1901) and Coe (1953), has enabled workers here to compile with some confidence a considerable list of local hoverflies. For the purpose of comparison, a glance at other local Midland hoverfly records is of interest. Rotheray (1979) gives the Staffordshire syrphids and his work draws in part on records from the Sandwell Valley, some 82 from that locality being mentioned. Since that work was published, the number of species found here has considerably increased and the present offering may be of value in supplementing some of the data given there. His total of 145 Staffordshire hoverflies may now be increased as a consequence of the addition here of 7 extra species these being *Metasyrphus latilunulatus*, *Ferdinandea ruficornis*, *Orthonevra brevicornis*, *Anasimyia contracta*, *Eumerus tuberculatus*, *Pipizella varipes* and *Xylota tarda*. There is additional data to the effect that *Eumerus tuberculatus* has been recorded in a garden at Newcastle (Staffs.) by C. W. Plant. Mr. D. W. Emley reports the discovery by R. A. Tribbeck of *Tropidia scita* at Aqualate. It is probable therefore that the Staffordshire hoverfly list now stands at 152 species.

Further reading concerning the hoverflies of the Birmingham area may be found in Payne (1980) on the R. C. Bradley collection of hoverflies, mainly from Sutton Park. Pugh (1977) provides another substantial species list from Clowes Wood. He tells me that since the publication of that paper, fifteen more hoverfly species have been found there, giving an updated total of 93 species from the site. These lists, together with the one given here, may well be considered to give a reasonably accurate picture of the hoverfly fauna of the Greater Birmingham area, for Sutton Park lies just to the North of the city, Clowes Wood being approximately South and the Sandwell Valley is to the West. The three sites provide a total of 149 different hoverflies and if *Xanthogramma pedissequum* (found \*1 St. John's Close, West Bromwich, W. Midlands.

in Moseley) is added, the grand total of 150 species obtained probably conforms with expectations, given the geographical location of Birmingham.

The data given for each species includes assessment of abundance, given by the following declining sequence; very common, common, frequent and several specimens. For species captured only once, the date of capture is given. For those in the other four categories, the month(s) of occurrence is indicated. The names of specialists who have checked identifications are given at the end of this paper. Their initials appear in parenthesis after certain species in the list indicating confirmation of the same. Additional information on some species is provided in the discussion. The arrangement and Nomenclature follow Stubbs and Falk (op. cit.).

### Species List

#### SYRPHIDAE: SYRPHINAE: BACCHINI

*Bacca obscuripennis* Mg. common 6-8; *Melanostoma mellinum* L. frequent 5-8; *M. scalare* Fab. very common 5-8; *Pachysphyria ambiguus* Fall. 26.5.84; *Platycheirus albimanus* Fab. common 5-8; *P. angustatus* Zett. common 5-7; *P. clypeatus* Mg. common 5-8; *P. fulviventris* Macq. 15.8.77; *P. manicatus* Mg. frequent 5, 6; *P. peltatus* Mg. frequent 6-9; *P. perpallidus* Verr. several 6; *P. scutatus* Mg. frequent 5-7; *Pyrophaena granditarsa* Forst. frequent 5-7; *P. rosarum* Fab. several 6-8.

#### SYRPHINI

*Chrysotoxum bicinctum* L. frequent 6-8; *C. festivum* L. frequent 6-8; *Dasysyrphus albostrigatus* Fall. frequent 5-8; *D. lunulatus* Mg. 3.6.73; *D. tricinctus* Fall. frequent 5-9; *D. venustus* Mg. frequent 5, 6; *Epistrophe elegans* Harr. frequent 5, 6; *E. grossulariae* Mg. frequent 6-8; *E. nitidicollis* Mg. several 5, 6; *Episyrphus balteatus* Deg. very common 6-9; *Leucozona* s. *Ischyrosyrphus glaucia* L. frequent 7-9; *L.s.laternaria* (Mull.) frequent 6-8; *L.s.Leucozona* s.s.*lucorum* L. common 5-8; *Melangyna compositarum* Verr. several 6-9; *M. labiatarum* Verr. several 6, 7; *M. lasiophthalma* Zett. several 3, 4; *M. umbellatarum* Fab. several 7-9; *Meligramma cincta* Fall. common 5-8; *M. guttata* Fall. several 6-8; *M. triangulifera* Zett. several 7-9; *Meliscaeva auricollis* Mg. frequent 4-8; *M. cinctella* Zett. frequent 5, 8, 9; *Metasyrphus corollae* Fab. common 7, 8; *M. latifasciatus* Macq. frequent 7, 8; *M. latilunulatus* Collin. 29.v.83 (A.E.S.); *M. luniger* Mg. common 4-9; *Parasyrphus punctulatus* Verr. several 4, 6. *Scaeva pyrastris* L. frequent 7, 8; *Sphaerophoria menthastri* L. several 7; *S. rueppellii* Wied. several 7; *S. scripta* L. frequent 7-9; *Syrphus ribesii* L. common 5-9; *S. torvus* O-S. several 6, 7, 9; *S. vitripennis* Mg. common 5-9.

## MILESIINAE

*Cheilosia albitarsis* Mg. frequent 5, 6; *C. bergenstammi* Beck. 11. viii.85; *C. grossa* Fall. several 4; *C. honesta* Rond. 30.v.84; *C. illustrata* Harris frequent 7, 8; *C. impressa* Lw. frequent 5-9; *C. intonsa* Lw. several 5, 8, 9; *C. pagana* Mg. common 6-9; *C. scutellata* Fall. frequent 7, 8; *C. variabilis* Panz. 5, 6; *C. velutina* Lw. several 8 (A.E.S.); *C. vernalis* Fall. frequent 4-8; *C. proxima* Zett. several 5-8. [the current status of *proxima* is uncertain. Records may include more than one species]. *Ferdinandea cuprea* Scop. several 6, 8; *F. ruficornis* Fab. 29.iv.84. (S.J.F.); *Rhingia campestris* Mg. frequent 4-8.

## CHRYSOGASTRINI

*Brachyopa scutellaris* R-D. several 6; *Chrysogaster chalybeata* Mg. frequent, 7; *C. hirtella* Lw. common 5, 6; *C. solstitialis* Fall. frequent 7, 8; *Lejogaster metallina* Fab. frequent 5, 6, 8; *Neoascia meticulosa* Scop. frequent 4, 5, 6; *N. podagrica* Fab. common 5-9; *N. tenur* Harris frequent 5, 6, 8; *Orthonevra brevicornis* Lw. 1.vi.80; *O. nobilis* Fall. 30.v.82; *O. splendens* Mg. common 7, 8; *Sphegina clunipes* Fall. several 5, 8, 9; *S. kimakowiczi* Strob. several 7, 8.

## ERISTALINI

*Anasimyia contracta* Claus. & Torp. several 7, 8; *A. lineata* Fab. several 7; *A. transfuga* L. several 6, 7, 8; *Eristalinus sepulchralis* L. frequent 5-8; *Eristalis S. Eoseristalis abusivus* Collin. 14.vii.84 (S. J. F.); *E. arbustorum* L. frequent 7, 8; *E. horticola* Deg. common 7-9; *E. intricarius* L. frequent 3-7; *E. nemorum* L. several 8; *E. pertinax* Scop. frequent 5-9; *S. Eristalis ss tenax* L. common 4-10; *Helophilus hybridus* Lw. several 7, 8; *H. pendulus* L. common 4-10; *Mallota cimbiciformis* Fall. 22.vii.78; *Myathropa florea* L. frequent 5-8; *Parhelophilus frutetorum* Fab. several 6, 8; *P. versicolor* Fab. several 5, 7, 9.

## MERODONTINI

*Eumerus strigatus* Fall. frequent 6-8; *E. tuberculatus* Rond. several 6; *Merodon equestris* Fab. frequent 6.

## PIPIZINI

*Heringia heringi* Zett. frequent 5-8 (G.E.R.); *Neocnemodon vit-ripennis* Mg. several 6, 8, 9; *Pipiza austriaca* Mg. several 6, 7, 8; *P. fenestrata* Mg. 2.vi.77 (G.E.R.); *P. luteitarsis* Zett. several 5, 6 (G.E.R.); *P. noctiluca* L. several 5; *Pipizella varipes* Mg. frequent 6-8 (A.E.S.); *Triglyphus primus* Lw. several 7, 8 (G.E.R.).

## VOLUCELLINI

*Volucella bombylans* L. frequent 6, 7; *V. pellucens* L. frequent 6-8.

## XYLOTINI

*Brachypalpoides lenta* Mg. 3.vi.77; *Chalcosyrphus s. Xylotina nemorum* Fab. frequent 5-7; *Criorhina floccosa* Mg. several 5, 6; *Syritta pipiens* L. common 5-8; *Xylota segnis* L. common 6-8; *X. sylvarum* L. frequent 6-8; *X. tarda* Mg. 1.x.81.

## Discussion

## BACCHINI

Of the species found, *Platycheirus fulviventris* and *P. perpallidus* are the least common. It may well be that the former was once regularly seen, as a considerable marshy area used to exist on the only site where it was found. Unfortunately, flooding of this to produce a lake changed the nature of the area and altered the habitat. Certainly no recent records for *P. fulviventris* exist although *P. perpallidus* is still present and is regularly seen flying over water in a well established bed of *Carex acutiformis*.

## SYRPHINI

Both *Chrysotoxum* species mentioned are regularly found in a wide variety of habitats and the genus *Dasysyrphus* is well represented with *D. albostrigatus* exhibiting some variation, spring specimens often having reduced markings (figure 1). *D. lunulatus* is apparently uncommon and no recent records exist (changes of land use have been considerable since the 1973 record), but the other *Dasysyrphus* species are present in good numbers. *Epistrophe grossulariae* appears to have flourished in warmer summers, 1983 and 1984 both being excellent years, very good years also being reported for *Ischyrosyrphus glaucia* (1981) and *L. lateralis* (1982). At present it is considered a difficult matter to separate *Melangyna compositarum* from *M. labiatarum* and whilst examination of local material suggests that both species are indeed present, re-examination will be necessary when a more comprehensive key to the genus appears. *Meligramma guttata* and *M. Triangulifera*, nationally scarce hoverflies, occur occasionally, the former being found on hogweed whilst the latter has been taken on flowering privet on three occasions in woodlands. The common *Meliscaeva auricollis* exhibits a considerable range of variation in abdominal pattern, var. *maculicornis* being not infrequent. The solitary *Metasyrphus latilunulatus* specimen was found in company with other hoverflies on the flowers of field maple. *Sphaerophoria* species of the district have yet to be studied in detail; *S. rueppellii* has, however, always been taken on open meadows.

## CHEILOSINI

It is probable that a more systematic survey will reveal more



*Cheilosia* species. Examination of *Senecio squalidus* flowers revealed *Cheilosia bergenstammi*. The larvae of this insect are reported as using *Senecio* spp as food plants and there may well have been such a relationship in the case given here. *C. grossa* is occasionally seen on *Salix caprea* early in the year but sightings are very dependent on the state of the weather. *C. intonsa* appears to be uncommon locally, those captured all occurring in a marshy area adjoining a fast flowing stream. Marsh Thistle which acts as host plant for several *Cheilosia* species, is absent from this particular site so it probably does not play a similar role in the life history of this fly. *C. velutina*, a little known fly, has been taken on hogweed and fennel. It seems to have a preference for recently disturbed ground. both *Ferdinandea* species occur in the valley, an exceptional state of affairs. *F. cuprea* shares a solitary damaged ash tree with *Brachyopa scutellaris* and both flies seem to be confined to that limited habitat, while *F. ruficornis* has been taken once on a damaged birch tree in an area of beech – birch woodland undisturbed in recent memory. There is some evidence that this fly may not be quite as rare as past records would suggest. Mr. Nigel Jones has just recorded it from the Wyre Forest and that, together with other recent records, would suggest at least a scattered distribution throughout England. Any information to throw further light on this matter would be welcome.

### CHRYSOGASTRINI

*Brachyopa scutellaris* (previously mentioned) appears to have one of the most limited yet predictable flight periods of hoverflies recorded here, appearing at the beginning of June and vanishing as if by magic, by the middle of the month. It was only discovered because I happened to pass the right tree at the right time. Goffe (1944) and Edwards (1952) both recorded it from gardens. These presumably would be regularly patrolled so one can assume that the chances of spotting an insect with so limited a flight period would be much enhanced in such a setting. Once again, observations on the appearances of this fly would be of considerable value. The other members of the tribe mentioned in our records are much more likely to be seen during a snap visit to the valley as the abundance of damp areas with lush vegetation provide an ideal habitat for them.

### ERISTALINI

*Anasimyia contracta* is known to be closely associated with *Typha latifolia* and this is corroborated in the Sandwell Valley as it has only been found in *Typha* localities, while *A. lineata* and *A. transfuga* have occurred in areas well away from any reedmace. Both the latter named insects have been taken flying together in some numbers over the root mats of a large patch of yellow iris

at the margin of a lake. The genus *Eristalis* has representatives appearing in considerable numbers on the site throughout the warmer months, *Eoseristalis abusivus* being the unexpected find. This is not the first Staffordshire record however, for it has been discovered on a similar site at Sugnall (Rotheray 1979). It has a predominantly coastal distribution and may have been brought into the area via the M.5 Motorway which is not far away (there are several other insect records, including Coleoptera, which suggest local colonization along the motorway system here). The same pattern may occur when other *E. abusivus* records are examined. *Mallota cimbiciformis* has been observed on one day only, when several flies were seen moving rapidly over brambles, very short rest periods being taken between flights. Unfortunately, the site from which they were recorded has been heavily disturbed by excavation. The two *Parhephilus* species present have somewhat similar flight characteristics to *M. cimbiciformis*. They are fortunately quite well established in the area. *P. frutetorum* does not seem to quite so attached to damp localities as *P. versicolor* and has been taken at woodland margins some distance from water.

#### MERODONTINI

Of the two *Eumerus* species recorded, *E. tuberculatus* has so far been found only in gardens in the Sandwell Valley, the other records from Staffordshire (mentioned in the introduction) also being from gardens. *E. strigatus*, however, has been found in a wider variety of habitats as has *Merodon equestris*, the large bulb fly, isolated specimens of which are liable to turn up anywhere in June, var. *equestris* and var. *narcissi* being the predominant forms.

#### PIPIZINI

It is difficult to estimate the abundance of flies in this tribe because identification in the field is problematic (often impossible). In the case of *Pipiza*, only *P. austriaca* can be recognized with any degree of confidence. In spite of this, there is some evidence that the locality is a stronghold for the genus as a whole. Especially noteworthy are the records for *Triglyphus primus*. Jeffries (1976) lists known records for this fly, the information given suggesting that it is very catholic in its choice of habitat. The Sandwell specimens taken as follows bear this out : 24.8.78. hogweed in hawthorn scrub; 4.7.82. golden rod by M5 motorway, 18.8.82. hogweed by a path in ancient woodland, 16.8.84. on hogweed at the fringe of a marshy area, 16.6.85. on broom, 8.7.85. numbers present on bramble, 25.8.85. on bramble.

In spite of these sightings, pinning down characteristic habits or habitats for this fly is difficult. One feature seems to be that in hot weather, it hovers at the interface of sun and shade, moving

very rapidly to the place where it is going to alight and vanishing with equal alacrity into the twilight. In cooler conditions it sits tight and sweeping probably gives the entomologist the best chance of securing it. Coe (op. cit.) gives information about the discovery of *T. primus* larvae on mugwort (*Artemisia vulgaris* L) in company with the aphid *Cryptosiphum artemisiae* (Buckton) on the continent. There is abundant mugwort in the Sandwell Valley although the presence of the aphid named has not yet been confirmed. It is therefore possible that a similar relationship exists here, but the variety of different places where the fly has been found, some at a distance from mugwort, suggests that a more general association with aphids is a distinct possibility. At any rate, the local success of this otherwise rare species is a matter giving cheer to otherwise embattled conservation persons!

### VOLUCELLINI

Both *Volucella* species are present in good numbers, *V. pellucens* having been bred in numbers from a *Vespula vulgaris* nest taken locally. *V. bombylans* is present in both forms normally with var. *plumata* much the more common. In 1985 no var. *bombylans* was seen although var. *plumata* was quite common.

### XYLOTINI

The very distinctive *Brachypalpoides lenta* has been taken once in an area of more ancient woodland for which it must surely be considered a marker species. Of the other flies mentioned *Criorhina floccosa* is a conspicuous insect fluctuating considerably in numbers from year to year. The very uncommon *Xylota tarda* was taken on Himalayan balsam.

### Conclusions

The hoverfly fauna of the Sandwell Valley is a rich one reflecting the vegetation and geology of the area. There are reasonably well-marked seasonal fluctuations in the numbers of some species but no particular reasons for these can be given although climatic factors must have some bearing on the situation. Several uncommon or rare species are present, one (*Triglyphus primus*) being on site in sufficient numbers to raise hopes that further details of its life history may be uncovered in the near future.

Following changes in land use at regular intervals, much of the locality is now settling down, with well-marked succession of vegetation taking place. In the course of time this will almost certainly bring changes in the hoverfly fauna. Study of these may enable a few firmer conclusions to be reached on the ecology of some of the species concerned.

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### Postscript

Since the preparation of this manuscript six further species of hoverfly have been found in the Sandwell Valley, and are as follows:

*Xanthandrus comtus* Harris 27.9.87; *Didea fasciata* Macquart 20.9.87; *Sphaerophoria batava* Goeld. 29.8.87; *Sericomyia silentis* Harris 29.8.87; *Criorhina berberina* Fab. 1.6.87 and *Criorhina berberina* f. *oxyacanthae* Meigen 5.6.87. I am indebted to Stephen Falk for checking the identity of *S. batava*. The discovery of *X. comtus* is another sign that this insect, so uncommon in recent years, is increasing its numbers again. Its addition to the Staffordshire list by Brian (1987) gives additional support for this view.

The last two flies in the above list are new to the Staffordshire list. A further six species, *Platycheirus* s.s. *tarsalis* Schummel (Keele), *Paragus haemorrhous* Mg. (Cannock), *Chelosia vulpina* Mg. (Loyn-ton Moss), *Lapposyrphus lapponicus* Zett., species A (Stafford), *Neoscia geniculata* Mg. (Ford Green) and *P. obliqua* Coe (Stafford) bring the total number of hoverflies recorded from Staffordshire to 161 species.

### References

- Bloxham, M. G. (1981). The Diptera (Calyptratae) of the Sandwell Valley, West Bromwich. *Entomologist's Rec. J. Var.* **93**: 183-184.
- Brian, M. C. (1987). *Xanthandrus comtus* (Harris) (Diptera: Syrphidae) new to Staffordshire. *Entomologist's Rec. J. Var.* **99**: 131.
- Coe, R. L. (1953). Diptera, Family Syrphidae. *Hanbk. Iden. Br. Insects* **10** (1) : 1-98.
- Edwards, J. (1952) Notes of Diptera. *Trans. N. Staffs. Field Club* **86**:76
- Goffe, E. R. (1944). *Brachyopa scutellaris* (Dipt. Syrphidae) in a cottage garden. *J. Soc. Br. ent.* **2**(6): 225.



- Jeffries, M. G. (1976). The distribution of *Triglyphus primus* Loew in Britain. *Entomologist's mon. Mag.* 111: 61.
- Payne, R. G. (1980). The hoverflies of the West Midlands County – a list of Diptera Syrphidae in the R. C. Bradley collection, Birmingham City Museum. *Proc. Birmingham Nat. Hist. Soc.* 24 (2) : 93-98.
- Pugh, M. N. (1977). The hoverflies of Clowes Wood nature reserve Warwickshire. *Proc. Birmingham. Nat. Hist. Soc.* 23 (4)
- Rotheray, G. E. (1979). *Atlas of the Diptera of Staffordshire*. Pt. 1. Hoverflies. City Museum, Stoke-on-Trent.
- Stubbs, A. F. and Falk, S. J. (1983). *British Hoverflies*. 253pp. London.
- Verall, G. H. (1901). *British Flies*. 8. Syrphidae etc. 691 pp. London.

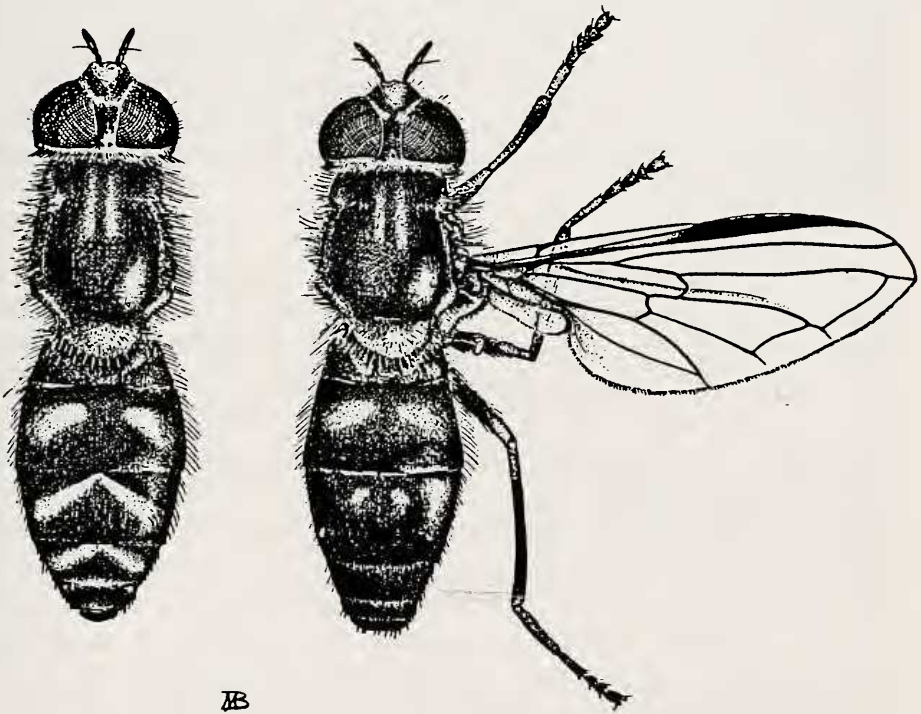


Fig. 1 *Dasysyrphus albostriatus* Fall. Spring specimen on right.

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DAHLICA (=SOLENOBIA) TRIQUETRELLA HBN. (LEP.: PSYCHIDAE) IN SOUTH ESSEX – It seems worth recording the presence of this species at Grays Chalk Quarry, South Essex during May 1986, when I collected two cases from the underside of a single piece of “breeze-block” dumped at the side of a hardcore track. The only previous record for either of the two Essex vice-counties appears to be that made by the Rev. C. R. N. Burrows who took cases at Mucking in 1919. However, both Hattenschwiler (in *Moths*